

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P244220

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244220  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B20D010 EC8B209727 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1605.0 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

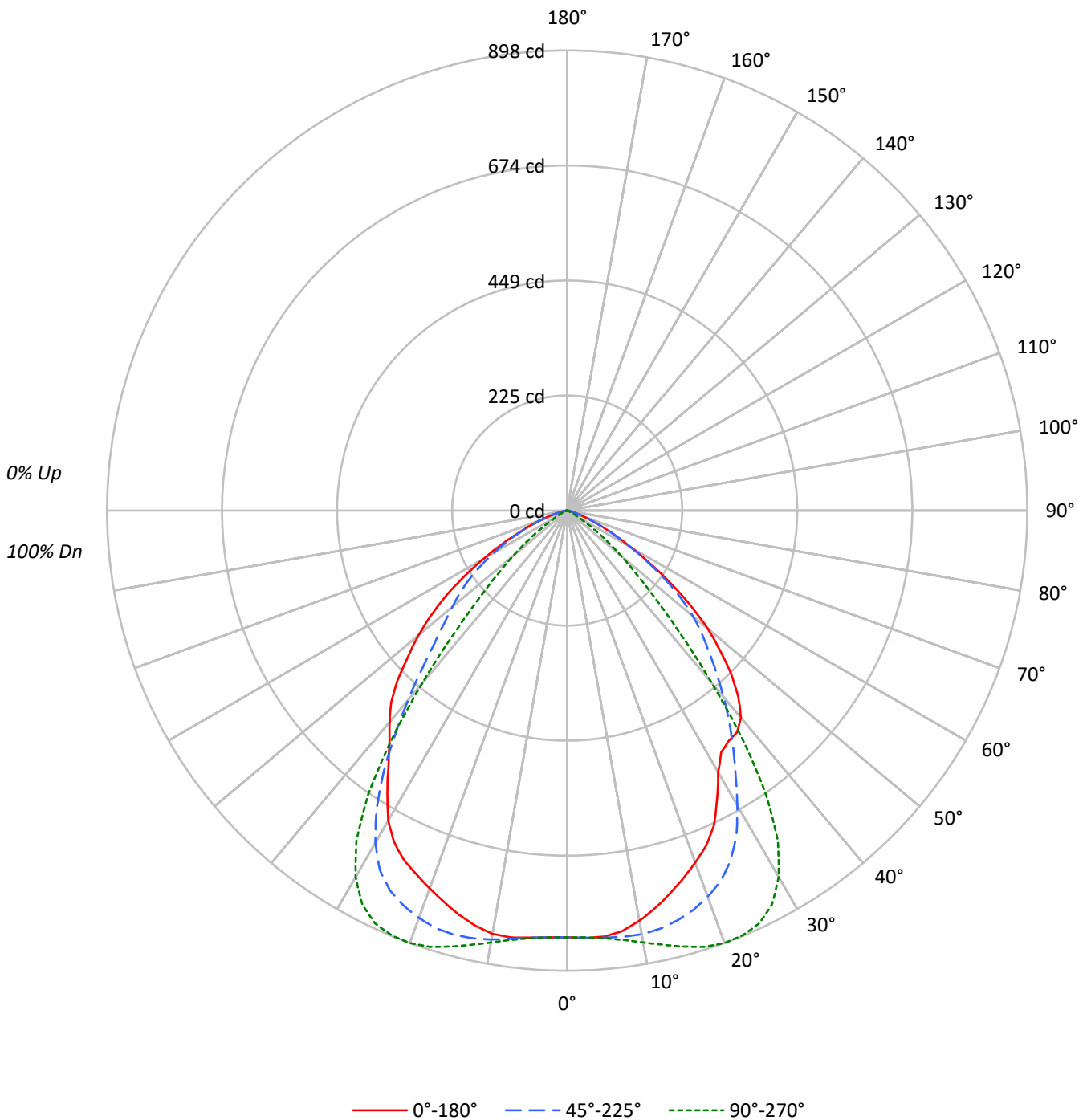
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P244220

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDW0LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.1	5.0
10°-20°	237.2	14.8
20°-30°	361.9	22.5
30°-40°	377.6	23.5
40°-50°	283.6	17.7
50°-60°	174.5	10.9
60°-70°	71.0	4.4
70°-80°	16.7	1.0
80°-90°	2.3	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	679.1	42.3
0°-40°	1056.8	65.8
0°-60°	1514.9	94.4
0°-90°	1605.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1605.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	833	833	833	833	833	
5°	834	837	838	837	837	79
15°	774	828	881	856	816	218
25°	678	754	888	818	753	308
35°	549	565	677	625	608	347
45°	453	392	245	366	468	346
55°	245	232	64	232	287	220
65°	76	77	10	104	110	80
75°	13	13	2	23	24	16
85°	1	1	0	3	4	2
90°	0	0	0	0	0	



TEST NUMBER: P244220

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDWOLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6
2.5°	834.8	833.5	834.8	834.8	835.3	834.4	834.8	835.3	834.4	834.4	834.4
5°	834.4	833.5	834.4	833.9	834.8	834.8	835.7	835.7	836.6	836.6	837.9
7.5°	827.3	825.6	827.3	828.6	829.5	831.3	833.5	835.3	837.0	838.8	841.0
10°	812.7	812.7	814.1	816.7	819.4	822.5	826.4	830.9	835.3	839.2	843.2
12.5°	794.6	793.3	795.9	799.5	803.5	808.3	814.5	821.1	828.2	836.2	842.3
15°	773.8	772.5	775.6	779.1	784.0	791.1	798.6	807.4	817.6	828.2	838.4
17.5°	752.6	752.2	755.3	760.1	764.1	771.6	781.4	792.0	803.5	817.6	830.9
20°	731.0	730.5	733.6	737.6	742.9	750.0	759.7	772.1	785.8	801.7	817.2
22.5°	708.4	708.9	711.5	715.9	720.4	727.9	738.0	750.4	765.4	782.7	799.9
25°	677.9	675.7	679.3	683.7	691.2	697.4	707.1	720.4	735.8	754.0	774.3
27.5°	633.7	633.3	636.4	640.4	647.0	654.5	665.1	678.8	695.2	715.1	734.9
30°	589.5	590.4	591.8	595.7	600.2	607.7	618.3	629.8	645.2	664.2	685.5
32.5°	559.5	559.5	561.3	563.9	567.0	571.0	578.5	586.9	598.8	612.1	627.6
35°	549.3	547.6	549.3	549.8	550.2	551.1	552.4	555.1	559.1	564.8	570.5
37.5°	544.9	543.6	543.6	541.8	539.6	537.0	533.4	529.4	525.0	519.3	514.9
40°	527.7	526.8	525.9	524.1	519.3	514.0	508.2	499.0	488.8	474.6	460.5
42.5°	494.5	493.7	493.2	489.7	485.3	479.1	472.4	462.7	449.9	431.8	411.4
45°	453.4	451.7	450.3	447.3	444.1	438.8	432.7	423.8	411.0	392.4	368.1
47.5°	405.7	404.8	404.4	403.1	400.0	396.9	392.9	385.8	374.3	356.6	331.5
50°	357.5	355.8	356.6	356.2	354.9	352.7	350.0	345.2	336.3	320.4	297.4
52.5°	302.3	302.3	301.9	303.2	303.6	303.2	303.6	298.3	290.8	278.9	259.4
55°	244.8	244.8	246.2	247.9	249.7	250.1	249.7	247.5	242.2	232.5	215.2
57.5°	190.9	190.0	192.7	195.3	197.1	198.9	197.5	195.8	192.7	184.7	171.5
60°	145.4	145.4	147.2	148.9	150.7	152.5	152.0	151.6	148.9	143.6	133.0
62.5°	106.9	107.4	107.4	108.7	110.5	112.3	113.6	112.3	110.9	107.4	100.3
65°	76.5	76.0	76.5	77.8	79.1	80.9	81.8	81.3	80.0	77.3	72.0
67.5°	51.3	50.8	52.6	53.0	53.9	55.7	55.2	55.7	55.2	53.0	48.6
70°	33.6	32.7	33.6	33.1	34.5	34.9	35.8	36.2	35.8	34.5	33.1
72.5°	20.8	20.3	20.8	21.2	21.7	22.1	23.0	23.0	22.5	21.7	19.9
75°	13.3	11.9	12.4	11.5	12.4	12.4	13.3	13.7	13.3	13.3	12.4
77.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.4	8.8	8.0	7.5
80°	4.0	4.0	4.4	4.4	4.4	4.9	4.4	4.4	4.4	4.9	3.5
82.5°	3.1	2.6	2.6	2.6	3.1	2.6	2.6	2.6	2.6	2.6	2.6
85°	1.3	1.8	1.3	0.9	1.3	1.3	1.8	1.3	1.3	1.3	1.8
87.5°	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.9	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P244220

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6
2.5°	834.8	833.9	833.9	833.5	834.4	833.5	833.9	833.5	833.5	834.4	833.5
5°	837.9	838.4	837.5	837.0	838.4	838.4	838.4	837.5	837.5	837.9	837.5
7.5°	842.3	843.2	843.7	844.1	845.0	845.4	845.4	845.0	844.6	845.9	844.1
10°	847.2	848.5	851.2	852.5	854.7	854.7	855.6	855.6	854.7	855.6	855.2
12.5°	845.4	853.4	857.8	860.9	864.0	866.6	867.5	868.0	867.5	869.3	867.5
15°	848.5	855.2	862.2	867.5	873.3	876.4	877.3	880.8	881.7	882.1	879.5
17.5°	843.7	855.6	863.1	871.1	879.5	885.2	890.5	892.7	893.2	894.0	890.5
20°	832.6	845.9	857.4	868.9	878.6	887.4	891.8	898.0	896.3	899.8	894.9
22.5°	817.6	832.6	847.2	862.2	872.4	883.0	892.3	896.7	898.9	898.9	893.6
25°	793.7	811.4	827.3	842.8	858.3	871.1	881.7	888.3	889.6	889.2	883.0
27.5°	756.6	775.6	794.2	811.9	830.9	845.9	858.3	866.2	868.4	868.4	861.8
30°	705.3	725.7	743.8	765.0	784.5	801.2	818.5	825.6	829.5	829.5	822.0
32.5°	644.4	661.6	678.4	699.2	720.4	739.4	755.7	765.4	770.3	769.9	763.2
35°	578.1	586.5	599.3	614.7	633.7	651.4	667.3	676.6	685.0	684.6	678.4
37.5°	511.8	509.6	510.9	516.6	528.6	540.9	553.3	562.2	569.2	572.3	571.0
40°	446.8	435.3	424.3	420.3	421.2	425.6	432.2	438.8	446.8	450.8	452.6
42.5°	388.5	369.0	349.6	335.0	326.6	323.9	327.0	329.2	334.1	339.9	345.6
45°	341.6	315.6	289.9	267.4	253.2	244.8	243.1	244.8	247.5	253.2	260.7
47.5°	303.2	272.7	244.0	218.8	198.0	186.9	183.9	183.0	185.6	190.9	201.1
50°	269.1	238.6	206.8	177.7	156.0	143.6	139.2	137.4	140.5	144.5	153.8
52.5°	232.0	202.0	169.3	141.0	118.4	105.6	100.8	98.1	99.9	105.2	114.5
55°	191.8	164.0	134.3	105.2	83.5	71.6	65.8	64.1	65.8	71.6	80.9
57.5°	151.6	128.2	103.4	76.0	56.6	44.6	38.9	37.1	42.0	44.2	53.9
60°	118.4	99.4	78.2	55.7	38.9	29.6	23.9	22.5	24.8	28.7	36.7
62.5°	88.8	76.9	60.1	39.8	28.7	19.0	15.9	14.6	15.9	19.0	25.2
65°	64.5	55.2	42.0	29.2	19.4	14.1	10.6	9.7	11.1	13.3	18.6
67.5°	44.2	37.1	29.2	20.3	13.3	8.8	7.5	7.5	8.0	9.7	13.7
70°	28.7	24.3	18.6	13.3	8.8	6.6	5.7	4.9	5.7	7.1	9.3
72.5°	18.1	15.5	11.9	9.3	6.6	4.9	4.0	3.5	4.4	5.3	7.1
75°	11.1	8.4	6.2	4.9	3.5	3.5	3.5	1.8	2.2	3.5	4.4
77.5°	6.6	5.7	4.9	4.0	3.1	1.8	1.8	1.8	2.2	2.6	4.0
80°	3.5	3.1	2.2	2.2	1.8	1.3	1.8	1.3	0.9	2.2	2.6
82.5°	2.2	1.8	1.8	1.8	2.2	0.9	1.3	0.9	1.3	1.8	1.3
85°	1.3	1.3	1.3	0.9	2.2	0.9	0.9	0.4	0.4	0.9	0.9
87.5°	0.0	0.4	0.4	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P244220

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6
2.5°	833.9	833.5	833.9	833.5	833.5	833.5	833.9	833.9	833.5	833.5	834.4
5°	837.5	837.5	837.5	837.0	836.6	836.6	837.5	837.5	836.2	837.5	837.5
7.5°	845.0	843.7	845.0	843.2	842.3	842.8	843.2	842.3	841.5	841.9	841.9
10°	854.7	853.4	853.4	852.1	850.7	849.9	849.0	846.8	844.6	844.1	842.3
12.5°	866.2	864.0	862.7	860.0	857.8	854.7	852.1	848.5	844.1	841.0	837.9
15°	877.7	874.2	871.1	866.6	861.8	856.5	850.7	845.0	837.9	831.7	826.4
17.5°	887.0	882.1	876.4	869.3	862.2	854.3	845.9	837.5	827.3	819.4	813.2
20°	890.1	883.0	875.5	866.2	856.9	845.9	835.3	824.2	812.7	804.3	797.3
22.5°	886.1	877.7	868.4	858.7	846.3	834.4	822.0	809.2	799.0	787.5	780.9
25°	875.0	864.9	854.7	843.2	831.3	818.0	804.8	791.5	779.1	773.0	764.6
27.5°	852.5	841.5	830.4	818.5	804.8	791.5	777.8	765.0	754.4	746.0	741.1
30°	812.7	799.9	787.1	774.3	762.4	748.6	735.8	725.2	714.6	708.0	703.1
32.5°	751.7	740.3	727.4	715.1	704.0	692.5	681.9	672.6	665.1	660.7	657.2
35°	669.5	658.1	648.3	639.5	630.2	625.4	618.7	613.4	610.3	608.6	608.1
37.5°	566.1	559.5	556.4	554.6	552.9	551.5	552.4	554.6	556.4	559.5	563.0
40°	455.6	461.4	463.2	469.3	475.1	482.6	491.0	500.7	508.7	518.8	525.9
42.5°	354.9	365.5	377.9	391.1	405.3	419.0	435.8	451.2	465.4	478.2	489.2
45°	272.7	289.0	307.6	326.6	345.6	365.5	385.8	404.8	421.6	435.3	446.8
47.5°	212.6	230.7	254.6	278.0	301.0	324.4	346.9	366.8	381.0	394.2	404.4
50°	168.4	189.2	215.2	242.2	267.4	292.1	316.0	334.6	348.7	359.3	366.8
52.5°	130.4	155.1	181.6	209.9	236.9	263.8	285.9	303.2	314.7	323.9	329.7
55°	97.2	121.5	149.8	179.0	206.4	232.5	253.2	268.3	278.4	283.7	286.8
57.5°	70.3	92.4	120.6	149.8	174.6	199.3	216.1	229.8	235.6	238.6	240.0
60°	51.3	71.6	96.8	122.0	145.4	165.3	179.9	189.2	193.6	195.3	194.9
62.5°	37.6	55.2	76.9	98.1	117.1	133.5	145.0	151.1	153.4	154.2	152.9
65°	28.7	42.4	61.0	77.3	91.9	103.9	112.3	116.2	117.6	117.1	116.2
67.5°	21.2	31.8	45.5	57.9	68.5	77.8	82.2	85.7	86.6	85.3	84.0
70°	15.0	23.4	33.1	41.5	49.5	54.8	59.7	60.1	60.1	59.7	58.8
72.5°	10.6	16.4	22.5	28.3	33.1	37.1	38.9	40.2	39.8	39.3	38.5
75°	7.1	10.2	16.4	17.7	22.1	23.4	25.2	25.2	25.6	24.3	24.3
77.5°	4.4	7.1	9.7	11.5	13.3	15.0	15.9	15.9	16.4	15.9	15.9
80°	2.6	4.4	5.3	8.0	8.0	9.3	9.7	10.2	9.3	10.6	9.3
82.5°	1.8	2.6	4.0	4.0	4.9	5.7	5.7	6.2	6.2	5.7	5.7
85°	1.3	1.8	2.2	2.6	2.6	3.1	2.6	2.6	3.1	3.5	3.1
87.5°	0.4	0.9	0.4	0.9	0.9	1.8	1.3	1.3	1.3	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P244220

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	832.6	832.6	832.6	832.6
2.5°	833.5	833.9	833.5	833.5
5°	837.5	837.0	837.5	836.6
7.5°	840.6	840.6	840.1	840.1
10°	840.6	838.8	838.8	838.8
12.5°	833.9	831.7	830.4	829.5
15°	822.5	818.5	816.7	816.3
17.5°	807.4	803.9	801.7	800.4
20°	790.2	786.7	784.0	784.5
22.5°	775.2	771.2	769.4	768.5
25°	760.1	755.3	754.0	753.1
27.5°	735.8	733.2	731.9	730.5
30°	698.7	697.4	695.2	698.3
32.5°	655.8	653.6	651.9	653.2
35°	608.6	607.2	608.6	607.7
37.5°	565.3	566.6	568.3	569.2
40°	531.2	536.1	537.8	538.7
42.5°	497.2	502.9	506.5	508.7
45°	455.2	460.9	464.9	467.6
47.5°	411.9	416.8	420.7	420.3
50°	372.6	375.2	377.0	378.7
52.5°	332.8	332.8	333.2	333.2
55°	287.7	286.8	286.4	286.8
57.5°	238.2	237.3	236.9	235.6
60°	193.1	190.5	188.7	188.7
62.5°	151.1	148.0	146.7	146.3
65°	113.6	113.1	110.5	110.0
67.5°	82.2	80.4	78.7	79.1
70°	57.9	55.2	55.2	54.4
72.5°	37.6	36.2	35.8	35.8
75°	23.4	23.4	22.5	24.3
77.5°	15.5	15.5	15.0	15.5
80°	9.3	9.3	9.3	8.8
82.5°	5.7	6.2	5.7	5.7
85°	3.1	3.5	2.6	4.0
87.5°	1.8	2.2	1.8	2.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)